

(PRIOR ART)

Figure 1

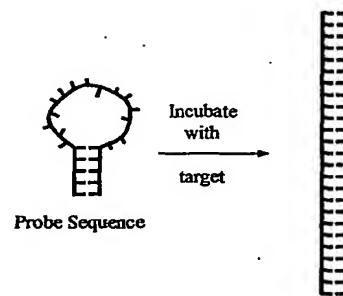


Figure 2

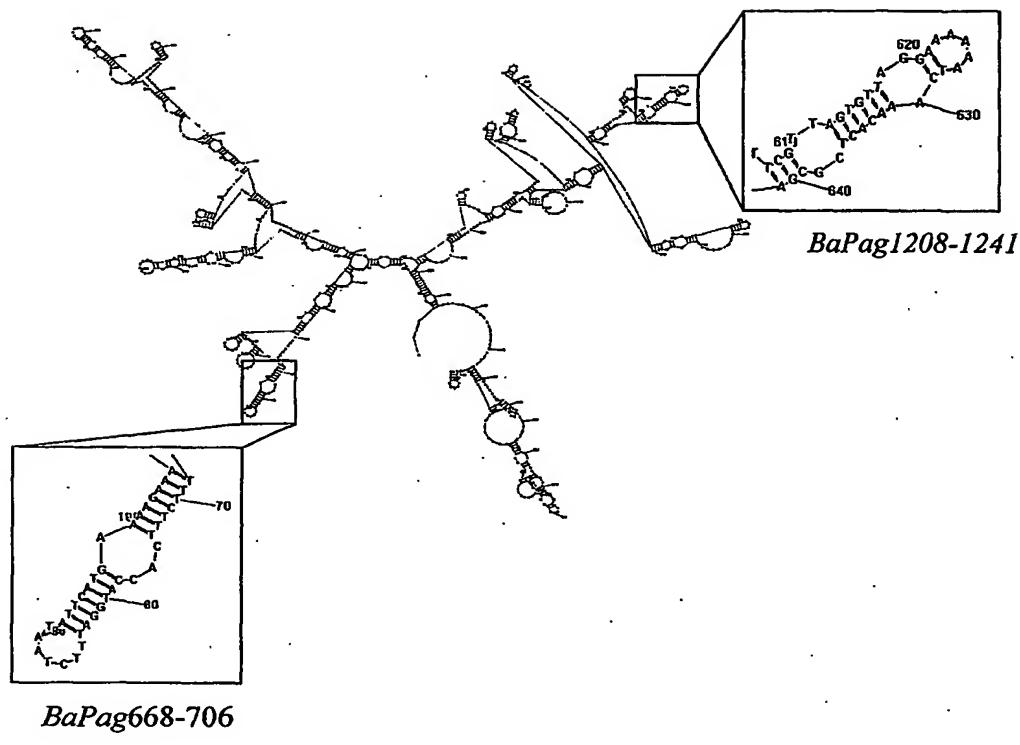
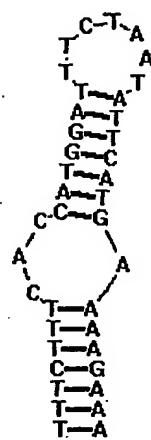
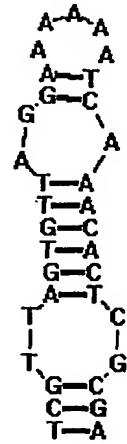


Figure 3



Pag 668 - 706
 $E_{\text{predict}} = -4.4 \text{ kcal/mol}$
 nt count = 39



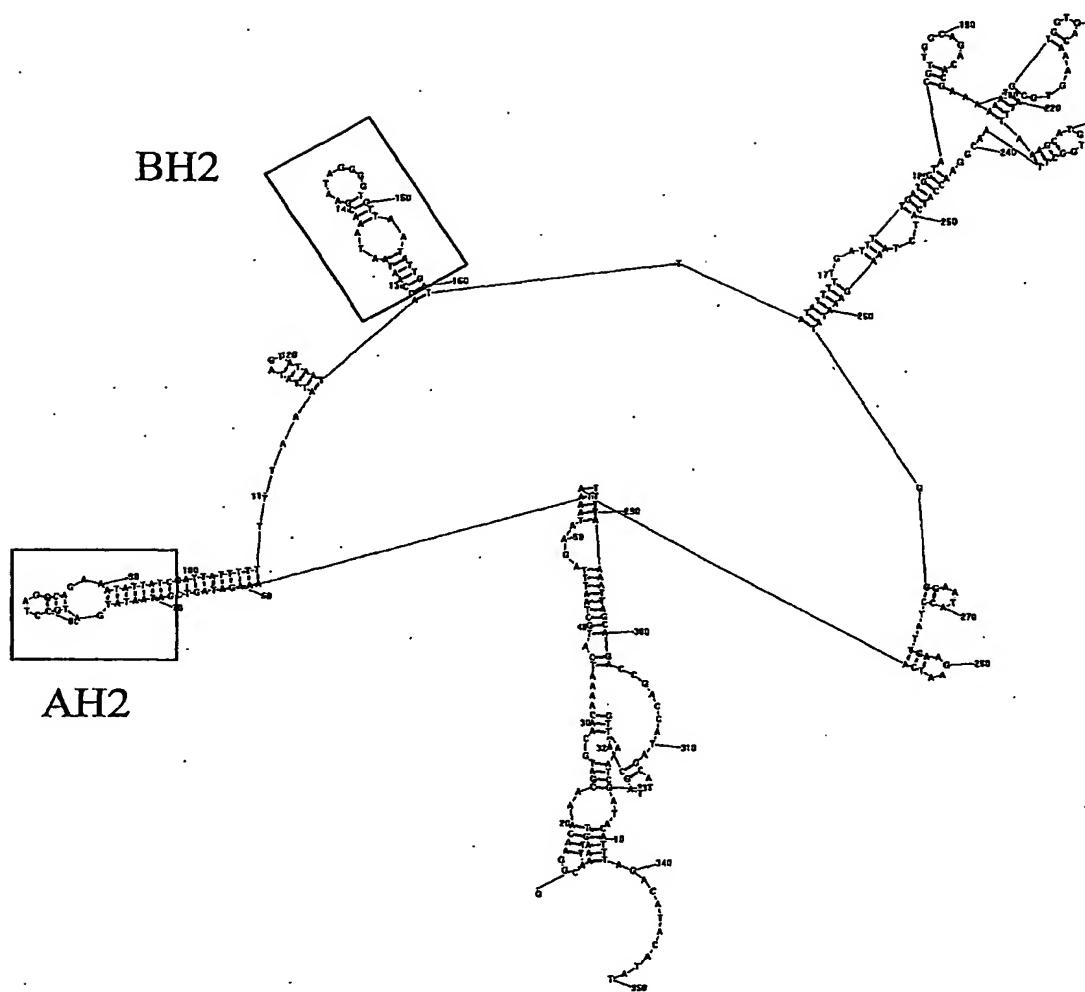
Pag 1208 - 1241
 $E_{\text{predict}} = -4.7 \text{ kcal/mol}$
 nt count = 34

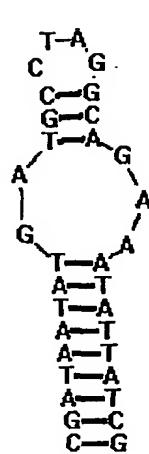
Figure 4A

Figure 4B

Sequences producing significant alignments:	Score (bits)	E Value
gi 20520075 gb PFO11190.11 Bacillus anthracis str. A2012 pl...	78	7e-13
gi 16031494 emb BAJ413937.1 BAN413937 Bacillus anthracis par...	78	7e-13
gi 16031492 emb BAJ413935.1 BAN413935 Bacillus anthracis par...	78	7e-13
gi 9280532 gb PFT268267.1 AF268267 Bacillus anthracis plasmid...	78	7e-13
gi 48942161 gb AF065404.11 Bacillus anthracis virulence plasmid...	78	7e-13
gi 10280952 gb AF306783.11 Bacillus anthracis isolate BA102...	78	7e-13
gi 10280950 gb AF306782.11 Bacillus anthracis plasmid pX01 ...	78	7e-13
gi 10280948 gb AF306781.11 Bacillus anthracis isolate 33 pr...	78	7e-13
gi 10280946 gb AF306780.11 Bacillus anthracis isolate BA103...	78	7e-13
gi 10280944 gb PFT268279.11 Bacillus anthracis isolate 28 pr...	78	7e-13
gi 10280942 gb AF306778.11 Bacillus anthracis plasmid pX01 ...	78	7e-13
gi 143290 gb M22583.1 BACFAG Bacillus anthracis cryptic pro...	78	7e-13
gi 183082941 gb AC104301.21 Homo sapiens chromosome 3 clone ...	42	0.038
gi 19033369 gb AC069286.71 Homo sapiens BAC clone RP11-261H...	40	0.15
gi 34849950 gb AC107065.51 Bos taurus clone rp42-513g13, co...	40	0.15
gi 30962736 gb AC137820.11 Medicago truncatula clone mth2-...	38	0.60
gi 30522931 gb AC123948.41 Mus musculus chromosome 10 clone...	38	0.60
gi 22552809 emb AL671857.161 Mouse DNA sequence from clone ...	38	0.60
gi 11414543 emb AL355352.161 Human DNA sequence from clone ...	38	0.60
gi 7768715 gb PFO01713.11 Homo sapiens genomic DNA, chromo...	38	0.60
gi 4827077 gb AF000178.11 Homo sapiens genomic DNA, chromo...	38	0.60
gi 4835635 gb AF000266.11 Homo sapiens genomic DNA, chromo...	38	0.60
gi 3132344 gb AF000034.11 Homo sapiens genomic DNA, chromo...	38	0.60
gi 4730836 gb AF000102.11 Homo sapiens genomic DNA of 21q2...	38	0.60
gi 3947430 gb AC003090.11 Homo sapiens BAC clone CTA-241I2 ...	35	2.4

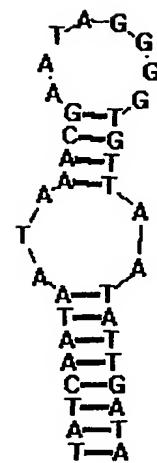
Figure 5





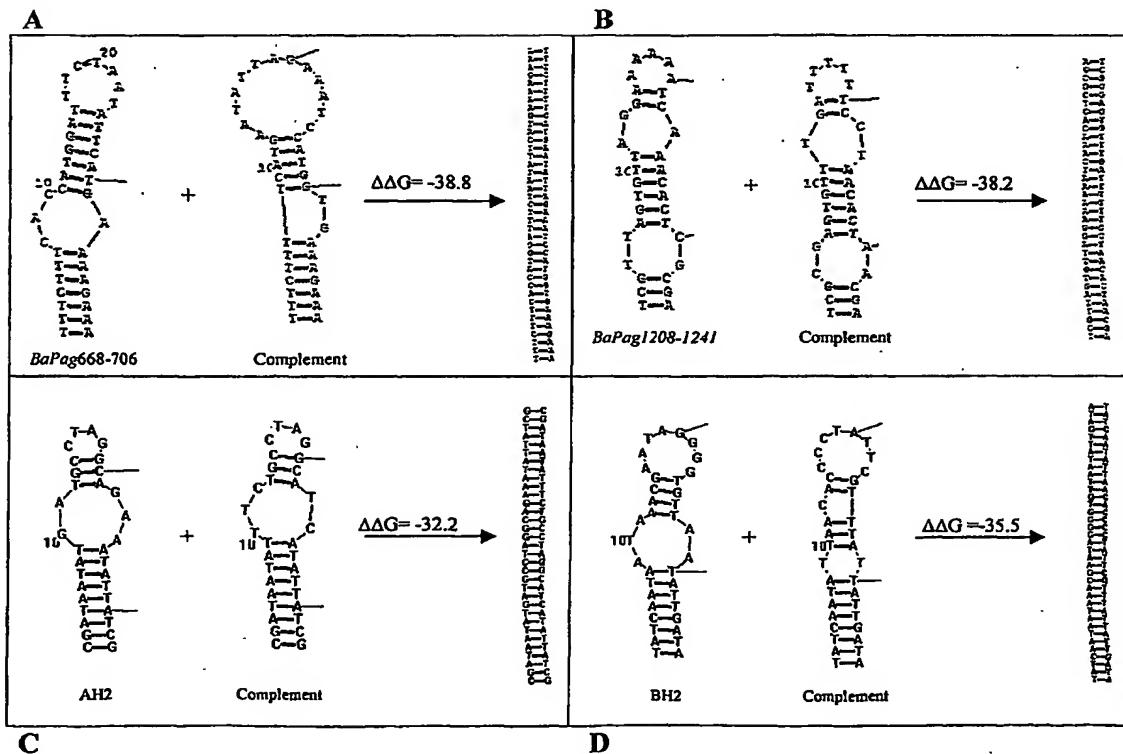
AH2
($E_{\text{predict}} = -6.1$ kcal/mol)
nt = 33

Figure 7A

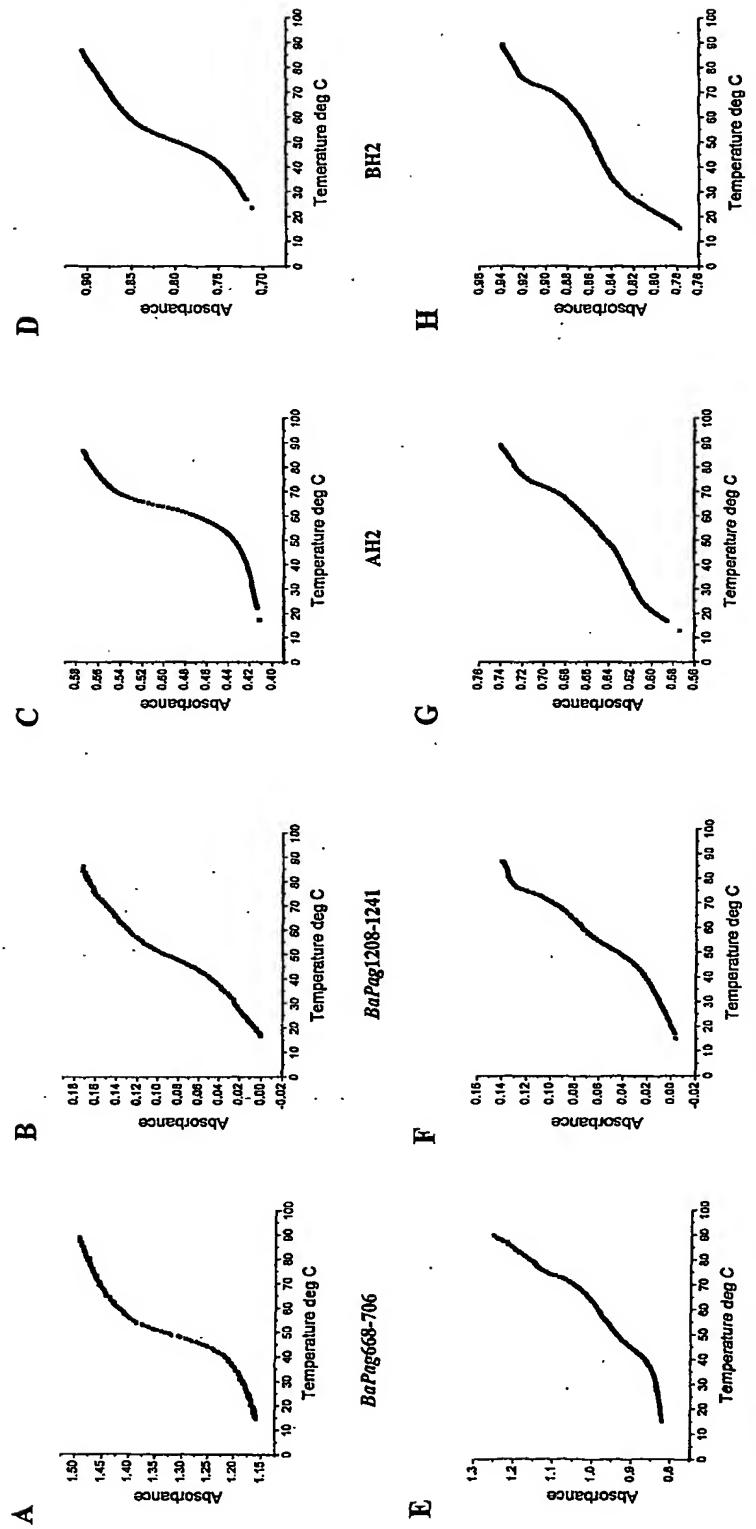


BH2
($E_{\text{predict}} = -3.5$ kcal/mol)
nt = 37

Figure 7B



Figures 8A-D



Figures 10A-H

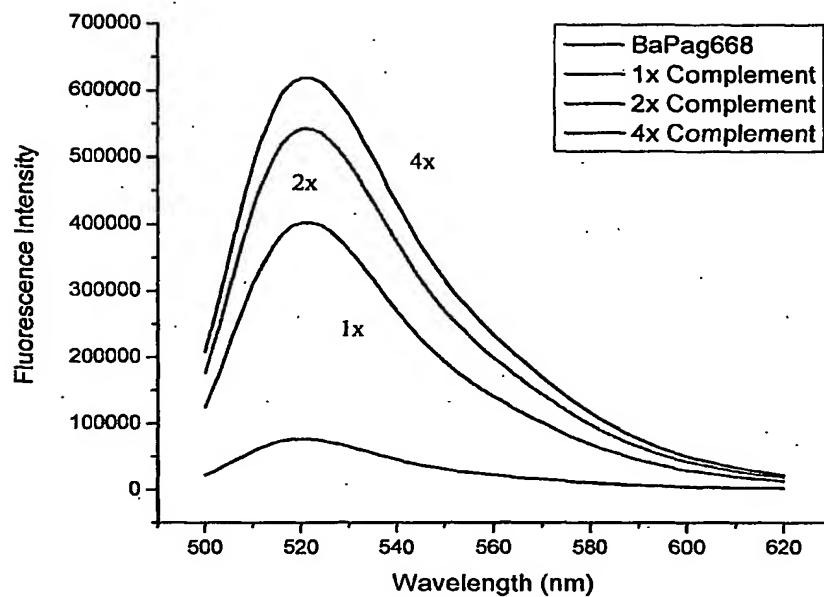
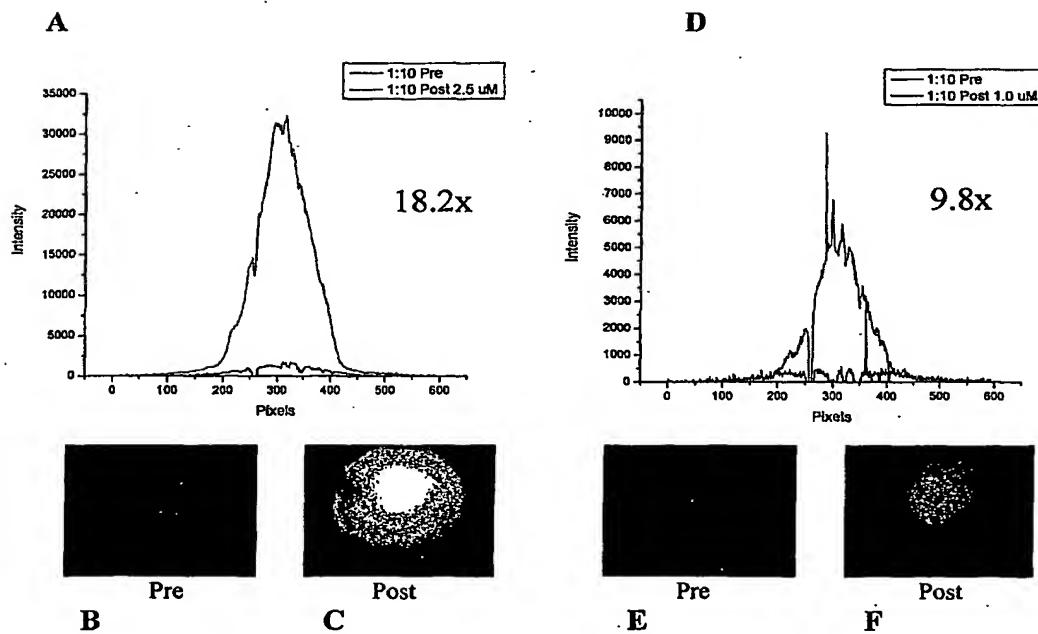
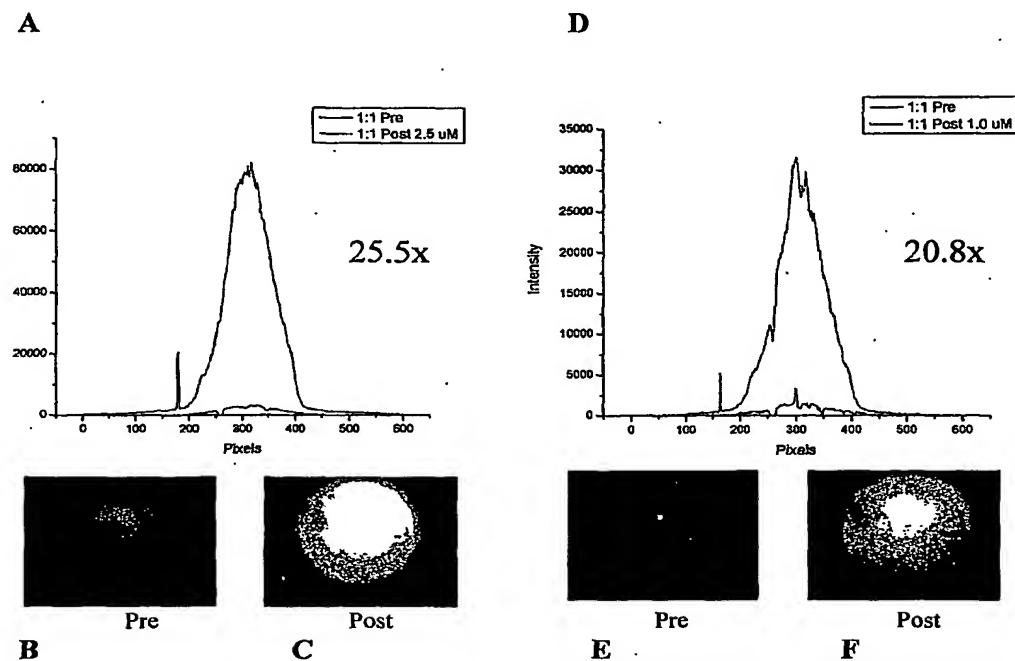
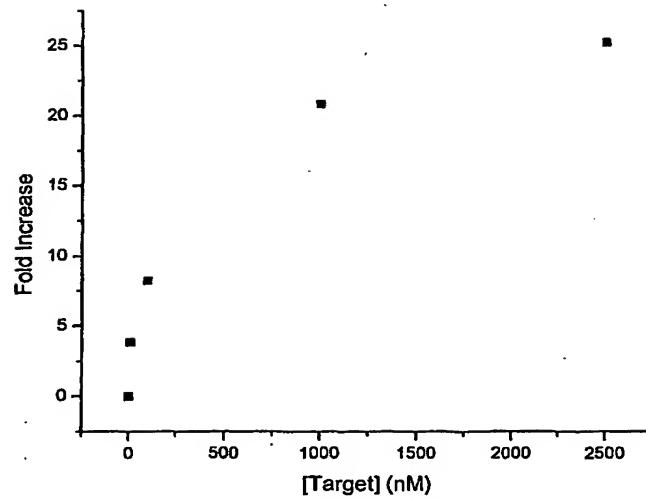
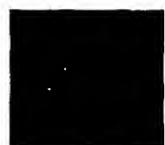
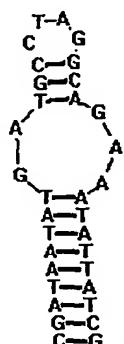


Figure 11



Figures 12A-F

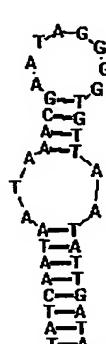
**Figures 13A-F****Figure 14**

A**AH2-Rhodamine**

Pre



Post

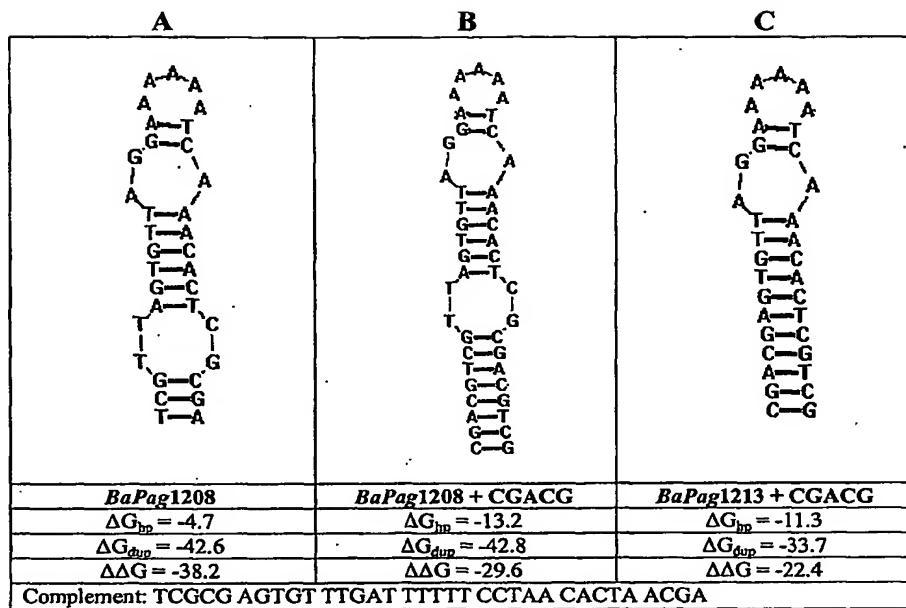
D**BH2-Cy5**

Post

B**C****E****F****Figures 15A-F****A****B****C**

<i>BaPag668</i>	<i>BaPag668 + CGACG</i>	<i>BaPag673 + CGACG</i>
$\Delta G_{hp} = -4.4$	$\Delta G_{hp} = -12.9$	$\Delta G_{hp} = -7.3$
$\Delta G_{dup} = -43.2$	$\Delta G_{dup} = -43.2$	$\Delta G_{dup} = -32.5$
$\Delta\Delta G = -38.8$	$\Delta\Delta G = -30.3$	$\Delta\Delta G = -25.2$
Complement: TTTCT TTTCA TGAAT ATTAG AAATC CATGG TGAAA GAAA		

Figures 16A-C



Figures 17A-C